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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/525,105 03/14/00 ABBOTT D TI-28098 **EXAMINER** MM91/0328 GARY C HONEYCUTT WILLIAMS.A TEXAS INSTRUMENTS INCORPORATED PAPER NUMBER **ART UNIT** PO BOX 655474 MS 3999 2826 DALLAS TX 75265 DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

03/28/01

Office Action Summary

Application No. 09/525,105

Applicant(s)

Examiner

Alexander Williams

Abbott et al.
Group Art Unit

2826



X Responsive to communication(s) filed on <u>Jan 16</u> 2001	<u> </u>
This action is FINAL.	
Since this application is in condition for allowance exception accordance with the practice under Ex parte Quayle,	pt for formal matters, prosecution as to the merits is closed 1935 C.D. 11; 453 O.G. 213.
	set to expire3 month(s), or thirty days, whichever illure to respond within the period for response will cause the tensions of time may be obtained under the provisions of
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s) 16-22	is/are withdrawn from consideration.
☐ Claim(s)	is/are allowed.
	is/are rejected.
☐ Claim(s)	
	are subject to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's P. ant Dra	
☐ The drawing(s) filed ons/are o	
☐ The proposed drawing correction, filed on	is Eapproved Edisapproved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examina	er.
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign price	
☐ All ☐ Some* ☐ None of the CERTIFIED copi	ies of the priority documents have been
received.	
received in Application No. (Series Code/Serial	
received in this national stage application from	
*Certified copies not received:	
Acknowledgement is made of a claim for domestic p	oriority under 35 U.S.C. § 119(e).
Attachment(s)	
■ Notice of References Cited, PTO-892	
☐ Information Disclosure Statement(s), PTO-1449, Pap	per No(s)
☐ Interview Summary, PTO-413☐ Notice of Draftsperson's Patent Drawing Review, PT	·O-948
■ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION	ON THE FOLLOWING PAGES

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Serial Number: 09/525105 Attorney's Docket #: TI-28098

Filing Date: 3/14/00; claimed foreign priority to 3/19/99

Applicant: Abbott et al.

Examiner: Alexander Williams

Applicant's election of Group I (claims 1 to 16) in Paper # 3, filed 1/16/01, has been acknowledged. Claim 16 should be grouped with the method claims and therefore will not be examined at this time. Group I now consist of claims 1 to 15.

This application contains claims 16 to 22 drawn to an invention non-elected without traverse in Paper No. 3.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claims 1 to 10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear and confusing to what is meant by "said gold layer providing a visual distinction to said area."

In claim 2, it is unclear and confusing to what is meant by "said gold providing a visual distinction to said area."

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Any of claims 1 to 10 not specifically addressed above are rejected as being dependent on one or more of the claims which have been specifically objected to above.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which formsthe basis for all obviousness rejections set forth in this Office
action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

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examiner to consider the applicability of 35 U.S.C. 103 $^{\circ}$ and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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Claim 1, insofar as it can be understood, is rejected under 35 U.S.C. \$ 102(b) as being anticipated by Tsuji et al. (U.S. Patent # 5,521,432).

For example, in claim 1, Tsuji et al. (Figures 1 to 13) specifically figure 9 show a leadframe 4-1 for use with integrated circuit chips 2 comprising: a plated layer 23 of gold selectively covering area of said leadframe intended for solder attachment; and said gold layer provided a visual distinction to said area.

Initially, and with respect to claims 2, 11 and 13, note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Fitzgerald, 205 USPQ 594, 596 (CCPA); In re Marosi et al., 218 USPQ 289 (CAFC); and most recently, In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) all of which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that Applicant has burden of proof in such cases as the above case law makes clear.

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Claims 2 to 9 and 11 to 15, insofar as some of them can be understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsuji et al. (U.S. Patent # 5,521,432) in view of Kom et al. (U.S. Patent # 6,150,711).

In claim 2 and similar claim 11, Tsuji et al. (Figures 1 to 13) specifically figure 9 show a leadframe 4-1 for use with integrated circuit chips 2, having a chip mount pad 3-1 and a plurality of lead segments 4-1, comprising: a leadframe base 4-1 of copper or copper alloy. Tsuji et al. fails to explicitly show a first layer of nickel deposited on said copper; a layer of alloy of nickel and palladium on first nickel layer; a second nickel layer; a layer of palladium and a layer of gold. However, Tsuji et al. does show a layer on the leadframe.

Kom et al. is cited for showing a multi-layer plated lead frame. Specifically, Kom et al. (figure 6) discloses a leadframe base made of copper 61; a first layer of nickel 62 deposited on said copper; a layer of alloy 63 of nickel and palladium on first nickel layer; a second nickel layer 64; a layer of palladium 65; and a layer of gold 62' for the purpose of improving the structure of plating layers.

In claim 3 to 8, Note that the specification contains no disclosure of either the critical nature of the claimed dimensions or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the Applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

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As to claims 9 to 15, using the combination of Tsuji et al. and Kom et al., it would be obvious to one of ordinary skill in the art to use claimed detailed on the structure of the leadframe in the device.

Therefore, it would have been obvious to one of ordinary skill in the art to use Tsuji et al.'s leadframe pad and device to modify Kom et al.'s leadframe for the purpose of improving the structure of plating layers.

As to the grounds of rejection under section 103, see MPEP \S 2113.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/666,675-678,690,692,693,696,698, 712,713,762,741,766-768,772,779,784,788	3/23/01
Other Documentation: foreign patents and literature in 257/666,675-678, 90,692,693,696,698, 712,713,762,741,766-768,772,779,784,788	3/23/01
Electronic data hase(s): U.S. Patents EAST	3/23/01

Papers related to this application may be submitted to

Technology Center 2800 by facsimile transmission. Papers should

be faxed to Technology Center 2800 via the Technology Center 2800

Fax center located in Crystal Plaza 4-5B15. The faxing of such

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papers must conform with the notice published in the Official

Gazette, 1096 OG 30 (November 15, 1989). The Technology Center

2800 Fax Center number is (703) 308-7722 or 24. Only Papers

related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to
the GROUP 2800 FAX CENTER.

Any inquiry concerning this communication or any earlier communication from the examiner should be directed to *Examiner Alexander Williams* whose telephone number is (703) 308-4863.

Any inquiry of a general nature or relating to the status of this application should be directed to the *Technology Center 2800 receptionist* whose telephone number is (703) 308-0956.

March 24, 2001

Primary Patent Examiner Alexander O. Williams